House Committee on Science, Space & Technology: Climate Science: Assumptions, Policy Implications, and the Scientific Method

Wednesday March 29, 2017 - 10:00am

https://science.house.gov/legislation/hearings/full-committee-hearing-climate-science-assumptions-policy-implications-and

Hearing Purpose:

To examine the scientific method as it relates to climate change in order to ensure the science that informs climate policy decisions is based on credible scientific methodology.

Witness List:

- Dr. Judith Curry, President, Climate Forecast Applications Network; Professor Emeritus, Georgia Institute of Technology
- Dr. John Christy, Professor and Director, Earth System Science Center, NSSTC, University of Alabama at Huntsville; State Climatologist, Alabama
- Dr. Michael Mann, Distinguished Professor of Atmospheric Science, Pennsylvania State University; Director, Earth System Science Center (ESSC), Pennsylvania State University
- Dr. Roger Pielke Jr., Professor, Environmental Studies Department, University of Colorado

Members Attending:

Majority: Smith (TX), Biggs (AZ), Brooks (AL), Higgins (LA), Rohrabacher (CA), Weber (TX), Webster (FL), LaHood (IL), Loudermilk (GA)

Minority: Johnson (TX), Bonamici (OR), Bera (CA), Tonko (NY), McNerney (CA), Takano (CA), Beyer (VA), Foster (IL), Esty (CT)

Overview:

Majority themes:

- The climate is changing and humans are to blame, but the extent of human-caused damage is unknown.
- Alarmist predictions are essentially guesses because the ability to predict far into the future is impossible. Anyone stating they know what the climate will be at the end of the century is not credible.
- Concern that climate scientists are biased in favor of results offering support for predetermined conclusions.
- Much of climate science today appears to be based more on exaggerations, personal agendas, and questionable predictions than on the scientific method.
- Only when scientists follow the scientific method can policymakers be confident they are making the right decisions. Until then, the debate should continue.

- Important to have best available data that is not subject to political or any other form of bias.
- Need to eliminate costly and unnecessary climate regulations and address uncertainties that still exist surrounding climate science.
- "The American economy is not to be trifled with."

Minority themes:

- The minority agrees with the broad scientific consensus that the climate is changing due to anthropogenic CO2 emissions.
- Acceptance of the idea of human-caused climate change spans the world, but ends at the doorstep of the Republican National Committee.
- Disappointed that Republican members in Congress and this committee reject scientific consensus and repeatedly call a handful of preferred witnesses to testify.
- Majority has brought condemnation upon the committee for its harassment of climate scientists via email subpoenas and other tactics to delegitimize their scientific findings.
- Hope that the committee will one day return to listening to scientists rather than harassing and lecturing them.
- Unfortunate the committee is holding this hearing to debate climate science and the scientific method when it should be looking at ways to advance scientific research and address climate change.
- Climate change is not a partisan issue.
- Science is not about trust, belief, or personal agendas. It is about knowledge and understanding.
- This panel in front of us is nowhere close to representative of the scientific consensus.

Witness statements & responses to questions:

Dr. Judith Curry

- Based on her independent analysis, the conclusions of the IPCC 2010 report are not justified.
- There are substantial uncertainties about how the climate system works.
- Senators, congressmen, and other scientists have publicly tried to discredit her findings.
- Scientists who demonize other scientists are doing so to reinforce their own agendas and are invalidating the scientific process.
- Disagreement on the value of paleoclimate data and global climate models.
- UNFCC framed the climate change problem too narrowly in order to support predetermined outcomes.
- "There are much better ways to assess science for policymakers than a consensus-seeking process."
- Expert panels of diverse backgrounds should handle scientific controversies and uncertainties.
- "Let's make scientific debate about climate change great again."
- Need better understanding of how ocean transports heat and the role water vapor/clouds play in heat transfer.

Dr. John Christy

- The scientific method has not been adequately followed for many climate change findings.
- The warming hypothesized by many climate models to occur has not actually happened.
- The scientific models on which climate policy is based can be scientifically falsified.
- Climate changes as a result of natural processes.
- The analysis on which policy decisions are based was sidetracked by those in control of the IPCC documents.
- Scientific reports from IPCC, American Association for the Advancement of Science, etc. and EPA in its endangerment finding are not written by people who are scientifically dispassionate-the scientific method was not followed.
- Climate models too sensitive to GHGs and don't accurately account for sunlight shielding of clouds.
- Science is not done with a poll, it's done with numbers.

Dr. Michael Mann

- There is extremely broad agreement among the world's scientists on the basic facts of human-caused climate change.
- Climate change is real. It is human caused. It is having adverse impacts on humans, the planet, and our economy.
- It is shameful that when 97% of scientists agree, only 25% of the panel at this hearing represents the views that overwhelming majority.
- Continuing to pose questions and attempting to answer them through scientific tools and methods is crucial.
- Anti-science forces have been attacking climate science specifically.
- The debate should be focused on how we address climate change, not over whether it exists.
- Scientists should not be persecuted and harassed because their findings are inconvenient to an ideology.
- Scientists should be expected to divulge their research funding sources.

Dr. Roger Pielke

- Did not appreciate his scientific integrity being questioned resulting from his 2013 committee hearing testimony.
- Little scientific basis to support claims that extreme weather events are influenced by manmade GHG emissions.
    - Mr. Pielke believes the IPCC findings support this.
- Recommendations increased diversity of opinions regarding scientific determinations.
- Legislative action is not well suited to provide accurate characterizations for the state of scientific understandings.
- Science and politics should be kept separate.
- The investigation of individual researchers is not an appropriate role for congress and a bipartisan truce ending such investigations should start immediately.